



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,549	08/23/2001	Lin Cheng	TS01-285	9167
54657 7590 11/26/2008 DUANE MORRIS LLP (TSMC) IP DEPARTMENT 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103-4196				
EXAMINER				
TRAN, HANH VAN				
ART UNIT		PAPER NUMBER		
3637				
MAIL DATE		DELIVERY MODE		
11/26/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/934,549

Applicant(s)

CHENG, LIN

Examiner

HANH V. TRAN

Art Unit

3637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 4-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 9-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This is the Final Office Action from the examiner in charge of this application in response to applicant's amendment dated 7/30/2008.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Since claim 1, line 21-22 recited the component box support units "capable of supporting a component box", this language would lead the examiner to believe that applicant's intent is to claim the "component box support units" and the "component box" is merely functionally recited. The problem arises when claim 2 recites "wherein said component box comprises..." which implies that the component box was positively recited in claim 1. Therefore, there is an inconsistency between the languages of the claims, thereby making the scope of the claims unclear. The examiner cannot be sure if applicant's intent is to claim merely the "box support units" or the "box support units" in combination with the "component box". Applicant is required to clarify whether claim 1 is intended to be drawn to either the "box support units" alone or the "box support units" in combination with the "component box", and the language of the claim amended to be consistent with the intent. Should claim 1 is intended to be drawn to the "box support units" alone, then in claim 2 "wherein said component box" should be amended "further comprising a component box which". Should claim 1 is intended to be

drawn to the "box support units" in combination with the "component box", then in claim 1, "capable of" should be deleted. For the purpose of this examination, the examiner is considering that claim 1 is drawn to the "box support units" alone.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1, 3 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 6,524,057 to Park in view of USP 6,454,512 to Weiss, USP 5749589 to Hopkins et al, Germany 3917874 to Seibert, USP 4,293,075 to Veralrud, USP 6,421,113 to Armentrout, and USP 5,873,585 to Engelking.

Park discloses a component transport cart comprising, such as shown in Fig 4, a lower portion comprising wheels 105, a platform 110 being substantially planar and having a first and a second surface opposite said first surface (with the second surface being defined as the surface having a control knob 190 rested thereon), said wheels

105 attached to said first surface of said platform, a plurality of corner portions being mounted on the second surface of the platform, an upper portion 150 disposed over said corner portions, with said corner portions forming an interface between said platform and said upper portion 150, said upper portion comprising a front surface, a back surface a planar bottom surface being orthogonal to said front and back surfaces, a top surface being parallel with said bottom surface, a left surface being located in a plane orthogonal to said planar bottom surface, a right surface being parallel with said left surface, an upper portion divider 155 provided in a plane parallel with said left and right surfaces, components box support units being mounted in a box support plane and capable of supporting a component box, adjacent rows of components box support units being separated by a distance, said component box support units extending from said front surface of the component cart to said back surface and arranged along said left and right surfaces, a handle attached to said support portion enabling motion of said component cart, wherein said component cart formed of anti-Electro Static Discharge materials. The differences being that Park fails to disclose shock absorbers being mounted on the second surface of the platform (instead of the corner portions), a plurality of upper portion dividers provided therein, component support units being arranged along the upper portion dividers, cushioning units arranged over the surface of the component box support units, a set of sliding doors mounted in a plane of the front surface, the box support plane angled with respect to the planar bottom surface and downwardly from the front surface, and the sliding doors are formed of anti-Electro Static Discharge materials.

Weiss teaches the idea of having shock absorbers 32 being mounted on the second surface of a platform in order to prevent damage to the wafers due to jolting of the cart during transporting of the wafers. Hopkins et al further teaches the idea of providing shock absorbers 76 being disposed between a platform 35 and an upper portion 21, such as shown in Figs 4-5, in order to absorb vibration between the platform 35 and the upper portion 21. Seibert teaches the idea of providing a transport cart with upper portion dividers therein to provide multiple compartments in order to increase the number of component support units therein, wherein a plurality of component support units being arranged along the upper portion dividers and extending from the front surface to the back surface of the component cart. Veralrud teaches the idea of having the component support units in a storage housing being slanted in a downward direction with respect to a plane of the horizontal bottom panel in order to prevent components placed on the support units from falling out. Armentrout teaches the idea of providing cushioning units 202A over the surface of the component box support units in order to avoid damage to the articles when inserting or removing from the upper portion (col. 6, lines 27-32). Engelking teaches the idea of providing a transport cart with sliding doors 110 in order to allow access to contents of the housing without having to pivot the door. Therefore, it would have been obvious to modify the structure of Park by providing the component cart with shock absorbers (in place of the corner portions) being mounted on the second surface of the platform in order to prevent damage to the articles placed therein due to jolting of the cart during transporting of the articles, as taught by Weiss, providing shock absorbers being disposed between the platform and the upper portion

in order to absorb vibration between the platform and the upper portion, as taught by Hopkins et al, providing the transport cart with upper portion dividers therein to provide multiple compartments in order to increase the number of component support units therein, wherein a plurality of component support units being arranged along the upper portion dividers and extending from the front surface to the back surface of the component cart, as taught by Seibert, having the component support units being slanted in a downward direction with respect to a plane of the planar bottom surface from the front surface in order to prevent articles placed on the support units from falling out, as taught by Veralrud, providing cushioning units over the surface of the component box support units in order to avoid damage to the articles when inserting or removing from the upper portion, as taught by Armentrout, and providing sliding doors in order to allow access to contents of the housing without having to pivot the door, as taught by Engelking, since each of the references teach alternate conventional component housing structure, used for the same intended purpose of housing components therein, thereby providing structure as claimed.

7. Claims 2 and 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Park, as modified, as applied to claim 1 above, and further in view of USP 4,999,671 to Iizuka.

Park, as modified, discloses all the elements as discussed above except for the component cart further comprising a plurality of reticle boxes, each with a reticle therein, said reticle boxes laterally disposed and each supported by a corresponding component box support unit.

Iizuka shows that a reticle transport cart is well known in the art in order to facilitate transporting reticles from one location to another, wherein the reticle transport cart comprises a plurality of component support units provided therein to support component boxes, wherein said component boxes being a plurality of reticle boxes, each with a reticle therein. Therefore, it would have been obvious and well within the level of one ordinary skill in the art to modify Park by using it as a reticle transport cart in order to facilitate transporting reticles from one location to another, wherein the reticle transport cart comprises a plurality of component support units provided therein to support component boxes, wherein said component boxes being a plurality of reticle boxes, each with a reticle therein, as taught by Iizuka, such that said reticle boxes laterally disposed and each supported by a corresponding component box support unit, since both teach alternate conventional component cart structure, used for the same intended purpose of transporting articles from one location to another, thereby providing structure as claimed.

Response to Arguments

8. In response to applicant's argument on page 8 that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a

reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

9. In response to applicant's argument on page 8 that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to combine the references can be found in the above art rejection having the triggered clause "in order to...".

10. In response to applicant's argument on page 9 that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

11. In response to applicant's argument on page 9 regarding the Examiner's comment in the Response to Arguments section of the Office action mailed on 5/2/2008, that statement was in response to applicant's argument that there is no motivation to combine the references. The examiner merely pointed out that the motivation to combine the references clearly stated in the claimed rejection following the "in order to" clause.

12. In response to applicant's argument on page 10 regarding Weiss, the examiner respectfully takes the position that Weiss is used for the teaching of providing a wafers transporting cart with shock absorbing means in order to prevent damage to the wafers due to jolting of the cart during transporting of the wafers; therefore, Weiss does not need to specifically disclose shock absorbers 32 serving as an interface between the platform and the upper portion.

13. In response to applicant's argument on pages 10-11 that "Hopkins does not provide the feature of a shock absorber disposed on the opposite side of a planar platform, with respect to the wheels", the examiner respectfully takes the position that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, Hopkins is used for the teaching of providing a shock absorber between a platform and an upper portion; therefore, Hopkins is not required to disclose the shock absorber disposed on the opposite side of the planar platform, with respect to the wheels.

14. In response to applicant's argument that Hopkins is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed

invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both Park and Hopkins are drawn to cart having wheels for transporting articles therein, thus analogous.

15. In response to applicant's argument on page 11 that the examiner has not and cannot show that one would attempt to modify Park by adding a shock absorber provided of Weiss or Hopkins because the Park device could not accommodate either shock absorber without a complete re-engineering of the Park device, the examiner respectfully disagrees with applicant's statement and takes the position that Park, as stated in the above claimed rejection, discloses a substantially planar platform 110 having wheels 105 attached to a first surface of the platform and four corner portions attached to its second surface (with the second surface being defined as the surface having a control knob 190 rested thereon). Therefore, Park is being modified, in view of the teaching of Weiss and Hopkins, by replacing the four corner portions with shock absorbers in order to prevent damage to the articles placed therein due to jolting of the cart during transporting of the articles and to absorb vibration between the platform and the upper portion 150. The examiner has clearly shown how Park is being modified in view of Weiss and Hopkins, and such modification does not require a complete re-engineering of the Park device.

16. In response to applicant's argument on page 12 that Armentrout fails to disclose the term "cushioning" or "cushion" anywhere in the reference and that reticle support feature 202 being formed of polycarbonate plastic impregnated with carbon fiber, which is clearly a rigid and a non-cushioning material, the examiner respectfully takes the

position that the reference is not required to specifically disclose or use the exact same term in order to meet the claimed limitation, and column 6, lines 27-32 of Armentrout clearly discloses pad 202A "may be soft in order to avoid damage to reticles", thus meets the claimed limitation of a cushioning unit.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HANH V. TRAN whose telephone number is (571)272-6868. The examiner can normally be reached on Monday-Thursday, and alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HVT
November 23, 2008

/Hanh V. Tran/
Primary Examiner, Art Unit 3637